REMARKS

Claims 1-32 are pending in the present application. Claims 1, 15, 22 and 28 are the pending independent claims.

Claims 1-32 are rejected under 35 U.S.C. §112, first and second paragraphs.

Claims 1, 2, 7, 9, 15, 20, 28 and 31 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,710,650 (hereinafter "Dugan") in view of U.S. Patent No. 6,025,944 (hereinafter "Mendez").

The remaining claims are rejected under 35 U.S.C. §103(a) as being unpatentable over Dugan and Mendez in view of other references.

In this response, Applicants traverse the §112 and §103(a) rejections, and amend independent claims 1, 15, 22 and 28.

With regard to the rejection under §112, first paragraph, the Examiner argues that the limitation of claim 1 relating to the assigned portions of the data signal each having the same bit rate as the data signal itself cannot be found in the specification. Applicants respectfully disagree. As Applicants noted in their prior response, support for this limitation can be found in the illustrative embodiment shown in FIG. 7 of the drawings, where an initial data stream 215 is separated into four portions, each of which is assigned to a corresponding one of four wavelength channels denoted λ_1, λ_2, λ_3 and λ_4. It is clear from this figure that the data contained in the four distinct portions of the initial data stream 215 in this example exhibit a bit rate which is the same as the bit rate of the initial data stream, because such data are actual, non-overlapping portions of that stream. In other words, since the portions in this example are non-overlapping portions of the initial data stream 215, the bit rate of the initial data stream is preserved in each of the respective portions.

It is important to recognize in this example that the portions are the data-containing areas only, and thus the bit rate within such portions is the same as the bit rate of the initial data stream from which the portions are separated. As described in the specification at page 7, lines 25-29, the initial data stream 215 "contained a pattern of 25 bits transmitted repeatedly" and "the 25-bit pattern was reproduced faithfully in all channels." The bit rate of the 25-bit pattern in initial data stream 215, and in each of the four non-overlapping portions separated from that initial data stream, is the same. The rejection under §112, first paragraph, is therefore traversed.

With regard to the rejection under §112, second paragraph, the Examiner argues that the specification does not enable the separation of a data signal into portions that each have the same bit rate as the original data signal. However, as Applicants outlined above, FIG. 7 of the drawings ands its associated textual description enable such an arrangement. Each of the four different non-overlapping portions of the repeating 25-bit pattern from the initial data stream 215 has the same bit rate as the initial data stream itself. Thus, the rejection under §112, second paragraph, is traversed.

Notwithstanding the traversal, Applicants have amended the claims to further clarify that the recited portions are non-overlapping portions, of the type shown in the example of FIG. 7 as described above, and that it is the non-overlapping portions that each have the same bit rate as the signal from which said portions are taken.

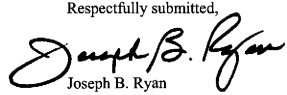
With regard to the §103(a) rejections, Applicants respectfully traverse on the ground that the collective teachings of the cited references fail to suggest the separation of a given data signal into distinct portions each of which has the same bit rate as the given data signal. For example, in the FIG. 2 arrangement of the Dugan reference, a high-speed OC-192 signal at 10 Gbps is processed through a one-to-four demultiplexer 56 to yield four OC-48 signals each at 2.5 Gbps. See Dugan at column 5, line 62, to column 6, line 27. The Examiner does not address this limitation in formulating the §103(a) rejections, apparently because the limitation is the subject of the §112 rejections. See the Office Action at page 4, section 6.

The amendments described above further clarify the position of Applicants on this point. For example, with reference to independent claim 1, the portions are now recited as being non-overlapping portions, and yet each has the same bit rate as the data signal of which it is a portion. This is clearly not the case in the arrangements disclosed in Dugan, and the Mendez reference and other cited art fail to supplement this fundamental deficiency of Dugan as applied to claim 1 as amended.

Similar amendments have been made to the other independent claims 15, 22 and 28.

In view of the above, Applicants believe that claims 1-32 as amended are in condition for allowance.

Respectfully submitted,



Date: December 6, 2006

Joseph B. Ryan
Attorney for Applicant(s)
Reg. No. 37,922
Ryan, Mason & Lewis, LLP
90 Forest Avenue
Locust Valley, NY 11560
(516) 759-7517